

Appl. No. 10/719,738
Reply to Non-Final Official Action of October 5, 2006

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REMARKS

Claims 1-20 are pending in this application. Claims 1, 4, 5, 8, 11, 15 and 18 are amended. Reconsideration of this application is respectfully requested.

Acknowledging for allowable subject matter

Applicants are grateful to the Examiner for acknowledging the allowable subject matter recited in Claims 5, 11 and 18. Claims 5, 11 and 18 have been rewritten in independent form to include the features that previously appear in base Claims 1, 3, 4, 8, 10, and 15, 17, respectively. Therefore, Claims 5, 11 and 18 are allowable.

Claim rejections under 35 U.S.C. §103(a)

The Action rejects Claims 1-4, 6-10, 12-17 and 19-20 under 35 U.S.C. §103(a) for allegedly being obvious over U.S. Patent No. 6,552,735 to Dehmlow ("Dehmlow") in view of U.S. Patent Application No. 2005/0052394 to Waterman ("Waterman").

Claim 1 recites "... displaying a primary sub-frame ... displaying at least one secondary sub-frame ... , wherein the primary and secondary sub-frames are displayed sequentially at a second frequency so that the separation of the two sub-frames is not detectable by a viewer." Claim 1 is not obvious over the combined teachings of Dehmlow and Waterman because one of ordinary skill in the art at the time the invention was made would not have been motivated to combine the art of record.

As conceded by the Action, Dehmlow fails to disclose that the primary and secondary sub-frames are displayed sequentially at a second frequency so that the separation of the two sub-frames is not detectable by a viewer.

Dehmlow discloses a method for eliminating latent images on display devices in which the maximum luminance of each independent emitter is adjusted so that the maximum luminance of all of the independent emitters is substantially the same as the maximum luminance of the independent emitter that has experienced the most decay. (Col. 1, Lines 53-65). In Step 32 of FIG. 2, Dehmlow samples signals 24 or 26 that represent the brightness, on/off status, or other

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status of each pixel. (Col. 2, Lines 54-58). Dehmlow then uses controller 18 to accumulate a history H of the status of each pixel and stores history H in memory 16 in Step 34. (Col. 2, Lines 58-60). Then Dehmlow estimates the luminance decay of each pixel in Step 36. (Col. 2, Lines 60-63). Dehmlow in Step 38 determines the lowest luminance value. (Col. 2, Line 66 to Col. 3, Line 3). In Steps 40 and 42, Dehmlow corrects luminance of each pixel so as to **equalize** the maximum luminance of more and less aged pixels by decreasing the maximum luminance of infrequently-used pixels to **match** the maximum luminance of frequently-used pixels. (Col. 3, Lines 3-8). By equalizing the luminance of frequently-used and infrequently-used pixels, a **final image** is displayed to a viewer, such that the effects of differential aging are rendered invisible. (Col. 3, Lines 8-10). Accordingly, Dehmlow directs one of ordinary skill in the art to display a final image. Dehmlow neither discloses nor suggests displaying a primary sub-frame and a secondary sub-frame that are displayed sequentially at a second frequency so that the separation of the two sub-frames is not detectable by a viewer.

Further, Waterman is directed to a method for a **liquid crystal microdisplay**. Waterman merely discloses displaying a first video information at a first voltage polarity and a **second video information at a second voltage polarity opposite to the first voltage polarity** such that an original video information can be viewed. (Paragraphs [0035]-[0036]). It is generally recognized that an operation of a light-emitting diode (LED) display is distinctive from that of an (liquid crystal display) LCD. An LED pixel includes an anode, a cathode and a semiconductor material layer disposed between the anode and the cathode. By applying a voltage difference between the anode and the cathode, electrons and holes combine in the semiconductor material layer and light is emitted therefrom. Accordingly, an LED display displays an image by controlling light luminance from LED pixels. Unlike an LED diode, an LCD uses a backlight module and a liquid crystal module. The backlight module is a light source from which light reaches the liquid crystal module. By polarizing liquid crystals, an LED display controls pass or non-pass of light through the liquid crystal module so as to display an image. Clearly, an LED display does **NOT use polarizations of liquid crystal** for displaying an image. Due to the distinctive operations of an LED and an LCD for displaying an image, one of ordinary skill in the art would not have been motivated to address the issue of the stressed and non-stressed pixels by Waterman's LCD polarization method.

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Based on the foregoing, one of ordinary skill in the art would not have been motivated by Waterman's disclosure to modify Dehmlow's method. Thus, a prima facie case of obviousness has not been established, and Claim 1 thus would not have been obvious over the combined teachings of Dehmlow and Waterman. Withdrawal of the rejection to Claim 1 is respectfully requested and Claim 1 is therefore allowable.

Claims 2-4, 6 and 7 depend from Claim 1 and are therefore not obvious over the art of record by virtue of dependency.

Claim 8 has been amended to recite that the primary and secondary sub-frames are displayed sequentially at a second frequency so that the video image frame is displayed without making the sequential displaying of the two sub-frames detectable by a viewer. For reasons analogous to those set forth above in connection with Claim 1, Claim 8 is not obvious over Dehmlow and Waterman. One of ordinary skill in the art would not have been motivated to combine the teachings of these references as alleged by the Action, and a prima facie case of obviousness has not been established. Withdrawal of the rejection of Claim 8 is respectfully requested.

Claims 9, 10 and 12-14 depend from Claim 8. Claims 9, 10 and 12-14 are also not obvious over the art of record by virtue of their dependencies. Withdrawal of the rejections of these claims is respectfully requested.

Claim 15 recites means for displaying a primary sub-frame and at least one secondary sub-frame sequentially at a second frequency so that the secondary sub-frame is not detectable by a viewer. For reasons similar to those set forth above with respect to Claim 1, Claim 15 is not obvious over Dehmlow and Waterman. Withdrawal of the rejections to Claim 15 is respectfully requested.

Claims 16, 17, 19 and 20 depend from Claim 15. Claims 16, 17, 19 and 20 are also not obvious over the art of record via virtue of their dependencies. Withdrawal of the rejections of these claims is respectfully requested.

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Based on the foregoing, reconsideration and withdrawal of the 103(a) rejections to Claims 1-4, 6-10, 12-17, 19 and 20 are respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Early notification to that effect is respectfully requested.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

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